Questions & Answers

Modification to the Hood Canal Summer Chum Salmon Joint Resource Management Plan

July 29, 2002

A "4(d) Rule" establishes protective regulations that apply to a species listed as threatened under the Endangered Species Act (ESA). For additional information concerning the 4(d) Rule go to the national Marine Fisheries Service (NMFS) web site: http://www.nwr.noaa.gov/1salmon/salmesa/final4d.htm

Question: What is the Hood Canal Summer Chum Salmon Joint Resource Management Plan?

Answer: The Washington Department of Fish and Wildlife (WDFW) and Point-No-Point Treaty Tribes, pursuant to their authorities under *U.S. v Washington*, provided a joint Resource Management Plan (RMP) to NMFS for salmon fisheries that will affect listed Hood Canal summer chum salmon. The harvest component of a document titled "Summer Chum Salmon Conservation Initiative - An Implementation Plan to Recover Summer Chum Salmon in the Hood Canal and Strait of Juan de Fuca" is the RMP. In a letter dated May 9, 2001, NMFS notified the WDFW and the Point-No-Point Treaty Tribes that the plan adequately addressed all of the requirements under Limit 6 of the ESA 4(d) Rule. A copy of the RMP is available at the WDFW web site: http://www.wa.gov/wdfw/fish/chum/chum.htm.

Question: What is the modification to the Resource Management Plan?

Answer: The modification is for the retention of chum salmon in the Washington Catch Reporting Area 7 Non-Treaty Reef Net Fishery from September 16 through 30, 2002 and 2003. The current harvest regime established in the RMP requires the release of all chum salmon in September. The reef net harvest will be limited to no more than 3,000 chum salmon annually. The majority of the chum salmon harvest will be of unlisted stocks returning to rivers throughout Puget Sound and southwest British Columbia, Canada.

Question 3: Who proposed the modification?

Answer: The modification was proposed by the Washington Department of Fish and Wildlife (WDFW). The concept of a chum salmon retention fishery during the later part of September was forwarded by the Washington Reef Net Owners Association. The WDFW, working with Non-Treaty fishermen and affected tribes, developed the concept into a proposal that was submitted to NMFS on April 11, 2002.

Question: What was NMFS' determination of the modification?

Answer: On July 1, 2002, NMFS determined that the proposed modification to the Hood Canal summer-run chum salmon RMP was within the scope of NMFS' original determination that the management plan adequately addresses the criteria established under Limit 6 of the ESA 4(d) Rule. The take prohibitions of paragraph (a) of the ESA 4(d) Rule would not apply to fisheries conducted in accordance with the proposed modification.

Question: What is the impact of the modification to Hood Canal summer-run chum salmon?

Answer: The best available scientific information indicates listed Hood Canal summer-run chum salmon are not present in Area 7 during the time the retention fishery would take place. Implementation of the fishery will include catch sampling tp provide additional stock composition information.

Question: Who can I talk to about the modification to the RMP?

Answer: Susan Bishop, Puget Sound Harvest Management Team Leader, NMFS, susan.bishop@noaa.gov, phone: 206-526-4587, or Keith Schultz, Fishery Biologist, NMFS, keith.schultz@noaa.gov, phone: 206-526-4447



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

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07/01/02

Date: June 13, 2002

To: Bill Robinson

> Assistant Regional Administrator Sustainable Fisheries Division

From: Susan Bishop—Puget Sound Harvest Team Leader Sustainable Fisheries Division

Attached is the staff's recommendation on a proposed modification by the Washington Department of Fish and Wildlife (WDFW) to the Hood Canal Summer-run Chum Salmon Resource Management Plan (RMP), approved under Limit 6 of the ESA 4(d) Rule on April 27, 2001. The proposed modification is the retention of chum salmon in the Washington Catch Reporting Area 7 (Area 7) Non-Treaty Reef Net Fishery from September 16 through 30, 2002 and 2003. The current harvest regime requires the release of chum salmon in September.

Based on our assessment, the proposed modification to the RMP is within the scope considered in NMFS' original determination that the management plan adequately addresses the criteria established under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule. As recommended, the take prohibitions of paragraph (a) of the ESA 4(d) Rule would not apply to fisheries conducted in accordance with the proposed modification.

Please review the staff recommendation and indicate your decision below.

1. I concur that the proposed modification to an existing limit under the ESA 4(d) Rule is consistent with the original evaluation and determination of the RMP.

Assistant Regional Administrator

2. I do not concur that the proposed modification to an existing limit under the ESA 4(d) Rule is consistent with the original evaluation and determination of the RMP.

Assistant Regional Administrator Date





Recommendation for a Proposed Modification to an Approved Limit under the ESA 4(d) Rule

Date of Recommendation: June 13, 2002

Limit Affected: Hood Canal Summer-run Chum Salmon Resource Management Plan

ESU Affected: Hood Canal Summer-run Chum Salmon Evolutionarily Significant Unit (ESU)

Date Limit was Approved: Approved under Limit 6 of the ESA 4(d) Rule on April 27, 2001

Proposed Modification: Retention of chum salmon in the Washington Catch Reporting Area 7 (Area 7) Non-Treaty Reef Net Fishery from September 16 through 30, 2002 and 2003. The current harvest regime requires the release of chum salmon in September.

Proposed By: Washington Department of Fish and Wildlife (WDFW)

Recommendation:

Based on our assessment, the proposed modification to the Hood Canal summer-run chum salmon joint resource management plan (RMP) is within the

scope considered in NMFS' original determination that the management plan adequately addresses the criteria established under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule. As recommended, the take prohibitions of paragraph (a) of the ESA 4(d) Rule would not apply to fisheries conducted in accordance with the proposed modification.

Background:

The harvest components of the Summer Chum Salmon Conservation Initiative, An Implementation Plan to Recover Summer Chum in the Hood Canal and Strait of Juan de Fuca Region (WDFW and Point-No-Point Treaty Tribes 2000), hereafter referred to as SCSCI, was evaluated by National Marine Fisheries Service (NMFS) as a RMP under

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Limit 6 of the ESA 4(d) Rule (July 10, 2000; 65 FRN 42422). In a letter dated May 9, 2001, NMFS notified the WDFW and the Point-No-Point Treaty Tribes that the plan adequately addressed all of the requirements under Limit 6 of the ESA 4(d) Rule, including the criteria in Limit 4 (Darm 2001).

The primary feature of the SCSCI's harvest strategy is the Base Conservation Regime (BCR), which is intended to initiate rebuilding by providing incremental increases in escapement over time while allowing a limited opportunity to harvest other species. Table 1 outlines the expected range of exploitation rates of Hood Canal summer-run chum salmon during the BCR. In addition, the SCSCI establishes fishery-specific management actions (regulations) for U.S. and Canadian pre-terminal, Washington terminal and Washington extreme terminal areas that are expected to result in exploitation rates within the guidelines. The regulations include the requirement that Area 7 (San Juan Islands) Non-Treaty reef net fishermen release all chum salmon during the entire month of September.

	Table 1. Expected	Base Conservation	Regime incidental	exploitation rates	and ranges by fishery.
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Fishery	Lower Guideline	Expected Average Exploitation Rate	Upper Guideline
Canadian U.S. pre-terminal Hood C. terminal	2.3%	6.3%	8.3%
	0.5%	2.5%	3.5%
	0.5%	2.1%	3.5%
Hood Canal Total ¹	3.3%	10.9%	15.3%
SJF Total ²	2.8%	8.8%	11.8%

¹ Total of Canadian, U.S. pre-terminal, and Hood Canal terminal exploitation rates.

The RMP also established critical thresholds for the five management units within the ESU. These critical thresholds were derived prior to the availability of the paper on Viable Salmonid Populations (NMFS 2000), but were determined to meet or exceed the guidelines established in the paper (July 10, 2000; 65 FRN 42422). Available information was insufficient to develop viable thresholds at the time of NMFS' determination of the RMP.

Description of Proposed Modification

The proposed modification to the RMP is described in a proposal submitted by WDFW to NMFS on April 11, 2002 (WDFW 2002a). The proposal would allow the retention of chum salmon in the Area 7 Non-Treaty reef net fishery during the period from September 16 through 30, 2002 and then again from September 16 through 30, 2003. The proposal requires interested reef net fishermen to submit a letter of intent to WDFW of their

² Total of Canadian and U.S. pre-terminal exploitation rates. There is no terminal area harvest of Strait of Juan de Fuca (SJF) populations.

intending participation in the fishery, "hail in and hail out" of the fishery in-season, and keep detail records of daily fishing activities in a logbook (WDFW 2002a).

The reef net harvest from these periods will be limited to no more than 3,000 chum salmon annually, with the guideline that no more than 1,500 chum salmon may be taken during the first week. The majority of the chum salmon caught are returning to rivers throughout Puget Sound and southwest British Columbia, Canada.

The proposal also requires that information be collected from the fishery to better evaluate the potential impacts (if any) of the fishery on listed chum salmon. Information collected would include the sampling of the chum salmon catch for genetic stock identification (GSI). Although the proposal as received does not outline the sampling

program, implementation of the fishery will be contingent on NMFS approving a sampling plan prior to fishing (WDFW 2002a). Post-season reports of sampling and monitoring activities will be available following the fishery closure (after September 30). An analysis of the results of the fishery would be completed by the following year's pre-season salmon fishery planning process (mid-March).

Evaluation:

Summary Statement

There is currently no direct information regarding the stock composition of chum salmon in Area 7 during September.
Assumptions about stock composition are derived from GSI information collected in the Canadian Area 20 fisheries (Figure 1) and observations of

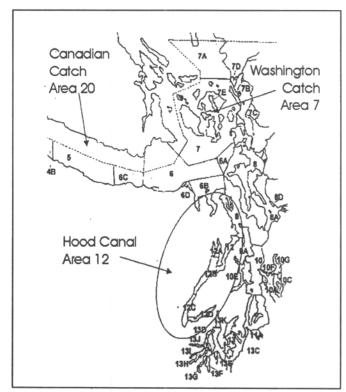


Figure 1. Hood Canal (Area 12) region showing relationship to the locations of Canadian Catch Area 20 and Washington Catch Area 7 (the area of the proposed regulation change).

escapements of chum salmon into the terminal areas (referred to in Lampsakis 2002a). Run reconstruction techniques are then used to estimate the relative abundance of

summer-run chum salmon in Area 7¹. The current model assumes no impact to listed summer-run chum salmon if retention is allowed beginning September 16 as proposed. Therefore, based on current information, the proposed action would result in no increase take of listed Hood Canal summer-run chum salmon.

1. Impact to species.

The best available scientific information indicates listed Hood Canal summer-run chum salmon are not present in Area 7 during the time the proposed fishery would take place. Therefore, the proposed modification to the SCSCI would have no effect on listed Hood Canal summer-run chum.

However, WDFW supplied an analysis that considers the impacts if this assumption was incorrect (WDFW 2002a). In their analysis, WDFW used an estimated 3.5% contribution rate of summer-run chum salmon during the proposed retention period. Available run timing information suggest that summer-run chum salmon presence declines rapidly at the end of the run. The potential contribution rate represents a value between 0%, (the current modeled rate for the proposed period) and 7% (the contribution rate modeled for the week of September 9 through September 15, the week immediately preceding the proposed retention period). Assuming that 3,000 chum salmon are landed by the Non-Treaty reef net fishermen during the September 16 through 30 period, and that the proportion of Hood Canal summer-run chum salmon in this harvest is 3.5% (the contribution rate), then 105 Hood Canal summer-run chum salmon would be taken in the Area 7 Non-Treaty reef net fishery.

In 2001, excluding Quilcene River (Area 82F) and Quilcene Bay (Area 12A) fisheries², 90 summer-run chum salmon were incidental taken in the Canadian and U.S. commercial fisheries from an estimated run size of 17,048 fish (Lampsakis 2002b). The Hood Canal harvest of summer-run chum salmon in the 2001 recreational fishery is unknown at this time. For the purpose of this analysis, the 2000 Hood Canal recreational harvest of 112

¹ Based on this technique, Hood Canal summer-run chum salmon composition in Area 7 are estimated as: September 1 through September 8 - 14%; September 9 though September 15 - 7%; and September 16 through September 30 - 0%.

² The Quilcene/Dabob Bay Management Unit is managed for a stepped exploitation rate based on escapement thresholds (page 314 of the SCSCI). In 2001, a total of 1,049 summer-run chum salmon was harvested in this fishery (Lampsakis 2002b), with an estimated escapement of 6,384 fish, exceeding the critical threshold of 1,110 fish (Table 2).

Table 2.	Run size, escapement and exploiation rate on Hood Canal summer-run chum salmon, 1986 to 2001. 1					
Year	Run Size ²	Total Escapement ³	Total Harvest	Harvest (Excluding 82F and 12A)	Exploitation Rate (Excluding 82F and 12A, in percent)	
1986	9,041	3,639	5,402	4,820	53.3	
1987	6.144	2.748	3,396	1,790	29.1	
1988	9,807	6,657	3,150	1,240	12.6	
1989	5,263	986	4,277	3,911	74.3	
1990	2.078	770	1,308	972	46.8	
1991	2,606	1.056	1,550	784	30.1	
1992	4,769	2,953	1,816	1,612	33.8	
1993	1,514	1,228	286	271	17.9	
1994	3.171	2,607	564	544	17.2	
1995	10,858	9,757	1,101	1,094	10.1	
1996	22,152	20,682	1,470	1,419	6.4	
1997	10,358	9,934	424	324	3.1	
1998	5,590	4,552	1,038	1,028	18.4	
1999	5,103	4,687	416	378	7.4	
2000	10,493	8,788	1,705	998	9.5	
2001 4	17,048	15,909	1,251	202	1.2	
1986 to 2001						
Average:		6,060	1,822	1,337	23.3	

¹ Information based on the state/tribal summer-run chum salmon run reconstruction database (Lampsakis 2002b).

summer-run chum salmon was used as a reasonable surrogate for the 2001 recreational take³. The resulting estimated overall take of 202 (90 commercial + 112 recreational take) summer-run chum salmon would convert to an 1.2% exploitation rate on the ESU. Assuming all summer-run chum salmon harvested in Area 7 during the proposed period are listed (this is a conservative assumption since a proportion of the take will include unlisted QNFH produced returning summer-run chum salmon), in WDFW's analysis, the potential reef net harvest of 105 Hood Canal summer-run chum salmon would add an additional 0.6% to the 2001 exploitation rate. Therefore, the resulting overall exploitation rate of 1.8% would have been well below the lower end of the exploitation

² Run Size entering Canadian Area 20.

³ Does not include escapement numbers for Skokmish River prior to 2001.

⁴ Preliminary information. Harvest includes an estimated 112 summer-run chum salmon taken in the Hood Canal recreational fishery.

³ Recreational regulations in Hood Canal were similar in 2000 and 2001. Recent Hood Canal recreational harvest of summer-run chum salmon include: 112 fish in 2000; 370 fish in 1999; 83 fish in 1998; 0 fish in 1997; and 56 fish in 1996 (per. comm. with Nick Lampsakis, PNPTC, on April 30, 2002).

rate guidelines established for the BCR (Table 1), and considerably below the historical average (Table 2).

In 2001, all Hood Canal summer-run chum salmon estimated escapement were well above the critical thresholds (Table 3). Assuming stocks are represented in the harvest proportional to the observed escapement, with the addition of the proposed Area 7 Non-Treaty reef net chum salmon retention fishery, these escapement objective would still have been achieved in 2001 (Table 3).

Table 3. Hood Canal summer-run chum salmon management units and associated escapement objectives compared to the 2001 preliminary escapement results and estimated escapement with the proposed fishery at 3.5% and 7% contribution rates.

Management	Populations	Critical	2001	Estimated Escapement	Estimated Escapement
Unit		Thresholds	Escapement ¹	At 3.5% ²	At 7% ²
Sequin Bay	Jimmmycomelately	200	283	281	279
Discovery Bay	Snow Creek/ Salmon Creek	720	2,792	2,771	2,751
Mainstem Hood Canal (Hood Canal Bridge to Ayres Point)	Lilliwaup Creek Hamma Hamma R. Duckabush River Dosewallips River	2,660	3,244	3,220	3,196
Quilcene/Dabob Bays	Big Quilcene/ Little Quilcene	1,110	6,384	6,337	6,290
SE Hood Canal	Union River	300	1,500	1,489	1,478

¹ Preliminary results as reported by WDFW (Johnson 2002). Escapement numbers include fish taken for broodstock. Includes 11 mortalities associated with the collection of broodstock in the Big Quilcene River.

2. Importance to determination.

The co-managers are proposing a minor modification to the existing RMP. NMFS' decision to approve the RMP was based upon effects of the BCR (regulations) that were designed to limit impacts to listed summer-run chum salmon and specified in Table 3.29 though Table 3.34 of the SCSCI. The non-retention of chum salmon by Non-Treaty reef net fishermen from August 1 through September 30 was included in these regulations (Table 3.32 of the SCSCI). However, the proposed Non-Treaty reef net chum salmon retention fishery during the later part of this period, September 16 through 30, was not important in and of itself to NMFS's decision for approval of the RMP. Although the stock composition monitoring associated with the proposal will provide new information to better assess the actual impacts.

² Assumes stocks are represented in the harvest proportional to the observed escapement.

3. Public expectation.

The concept of a chum salmon retention fishery during the later part of September was forwarded by the Washington Reef Net Owners Association (Giard 2002). The state, working with Non-Treaty fishermen and affected tribes, developed the concept into a proposal that was submitted to NMFS on April 11, 2002 (WDFW 2002a). The proposal, as submitted, was reviewed and agreed to by the affected tribal co-managers (WDFW 2002b). However, even with state, tribal, and Non-Treaty reef net fishermen support, confusion may still result when regulations are enacted that may be different then what NMFS approved and published in the final determination of the RMP (66 FR 31600). Although, in reviewing public comments received from NMFS' proposed evaluation and recommended determination of the RMP (66 FR 14551), there were no comments received that would make us believe that the chum salmon retention in Area 7 during late September would be a controversial issue.

4. Provisions in the plan for change.

NMFS's evaluation and determination of the original RMP recognized that the plan's management strategies will continue to evolve and adapt. The RMP includes provisions for changes to actions and objectives based on new information and progress on rebuilding. It is also noted that in the SCSCI, GSI sampling in Washington Catch Area 7 was identified as a data gap. The accuracy in the stock composition database for a given area is fundamental to estimate the impacts of fisheries on listed species. The information collected from proposal can be used to address an identified data need. This proposed fishery will improve our understanding of past, present, and future impacts of Area 7 fisheries on listed fish.

Citations:

Darm, D. 2001. Letter to Dr. Jeffrey Koenings (WDFW) and Mr. Randy Harder (PNPTC) from Donna Darm, Acting Regional Administrator, NMFS, May 9, 2001.

Giard, J. 2002. Letter from Jack Giard (Washington Reef Net Owners Association) to Nick Lampsakis (PNPTC) dated January 18, 2002. 2 pp.

Johnson, T.H. 2002. Washington Department of Fish and Wildlife memorandum from Thom H. Johnson (WDFW) to distribution, Subject BY 2001 Spawning Escapements Hood Canal Summer Chum ESU, dated May 25, 2002. 2 pp.

Lampsakis, N. 2002a. Letter from Nick Lampsakis (PNPTC) to Jack Giard (President of the Washington Reef Net Owners Association) dated January 24, 2002. 2 pp.

Lampsakis, N. 2002b. E-mail from Nick Lampsakis (PNPTC) to Keith Schultz (NMFS) containing an Excel spreadsheet titled Reconstruction of the HC-SJF Summer Chum Salmon ESU Runs (SChum86-01.xls), dated January 24, 2002.

National Marine Fisheries Service (NMFS). 2000. Viable salmon populations and the recovery of evolutionarily significant units. NOAA Technical Memorandum NMFS-NWFSC-42.

Washington Department of Fish and Wildlife (WDFW). 2002a. Proposal for 2002-03 Evaluation of Area 7 Reefnet Fishery Chum Retention in Late September, dated April 8, 2002. 4 pp.

Washington Department of Fish and Wildlife (WDFW). 2002b. Letter from Rich Lincoln (WDFW) to Keith Schultz (NMFS) dated April 11, 2002. 1 pp. plus attachment (proposal).

Washington Department of Fish and Wildlife (WDFW) and Point-No-Point Treaty Tribes (PNPTC). 2000. Summer Chum Salmon Conservation Initiative - An Implementation Plan to Recover Summer Chum in the Hood Canal and Strait of Juan de Fuca Region. J. Ames, G. Graves and C. Weller [eds.]. Wash. Dept. Fish and Wild., Olympia, WA. www.wa.gov/wdfw . 382 pp + Appendices.